

Geometries that Delight

Exploring Advanced 3D Surface Creation

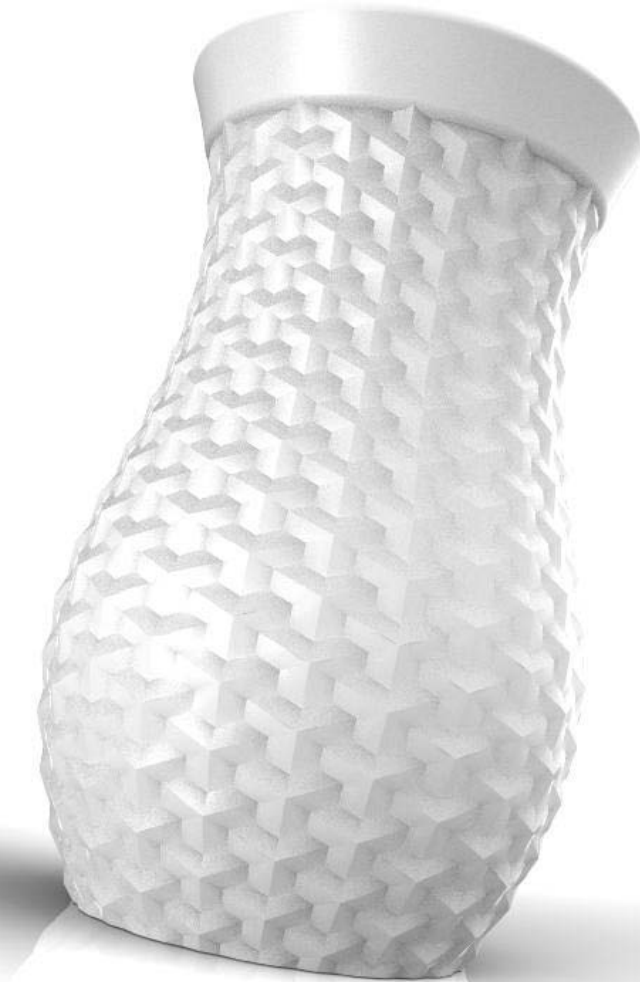
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June 4, 2012

Session Objectives

- 1 To enhance and expand your knowledge of advanced feature creation tools.
- 2 To demonstrate how complex 3D repeatable geometry can enhance product appearance and function.
- 3 To help you discover and understand how to use tools and features in combination to develop robust parametric models.



Trend

3D

An emerging trend in consumer products across **every industry** is the use of intricate three dimensional surface geometries to create products that appeal to the sense and offer an unexpected

“Surprise and Delight”

JAWBONE



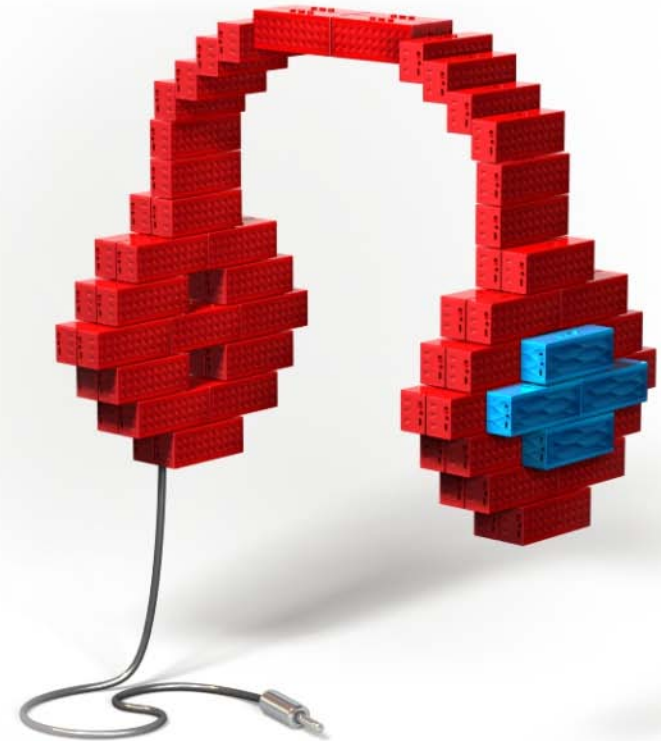
3D surface embellishments offer opportunity to infuse a taste of fashion.

JAWBONE

Fashion ~ Function Blend



50 MOST INNOVATIVE COMPANIES



SWIPE
to see it
again

18

Jawbone

**FOR ROCKING
THE MOBILE LIFESTYLE**

BY FARHAD MANJOO

ILLUSTRATION BY JOE ZEFF DESIGN



JAWBONE

Fashion ~ Function Blend

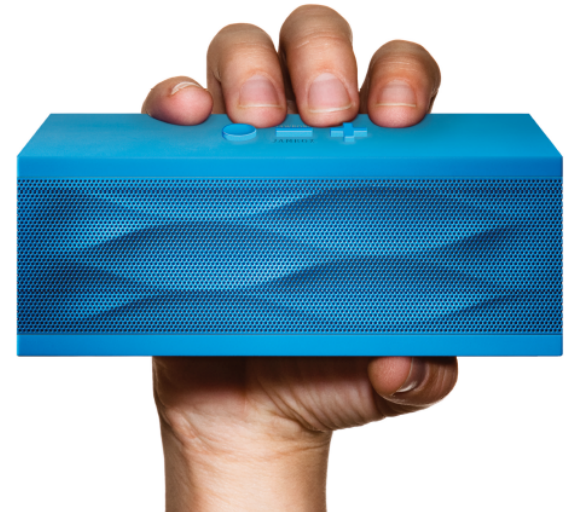


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most innovative company. A few weeks after Up went on sale, Jawbone began hearing reports that some wristbands were dying. At first, the problem, which engineers tracked to a couple of bum capacitors in some units, looked like it could kill the prospects for the young device. But Jawbone found a novel way to redeem itself. It temporarily put a stop to new orders and offered an unusual guarantee to everyone who'd already purchased a wristband, promising to refund their money, no questions asked. You didn't even have to send in your dead Up. It was savvier than the way Apple handled the iPhone 4's "antennagate," and the company scored another \$40 million in funding after the controversy. In other words, Jawbone is adding its own pages to the playbook.

Jawbone's Jambox wireless speaker reverberated through the industry with its muscular sound, jewel-like case, and deep understanding of smartphone users.

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manjoo@fastcompany.com



Fashion ~ Function Blend



Fashion ~ Function Blend





Fashion ~ Function Blend



screen legend

If Oscar Niemeyer is Brazilian architecture's king of curves, Marcio Kogan is its prince of minimalism. His Studio MK27 creates drama with strikingly spare, boxy buildings as opposed to Niemeyer structures influenced by the country's shapely topography and female residents. But look closely—very closely—at the house that Kogan designed for a large art-collecting family in an upscale neighborhood near a São Paulo park, and you'll see curves aplenty. They're the intertwined forms of modular screens wrapping a rooftop pavilion.

This ethereal facade is the exquisite result of a collaboration with sculptor Erwin Hauer, an *Interior Design* Hall of Fame member whose sinuous geometric screens have seduced designers from Florence Knoll to Philip Johnson and beyond. The pattern that Kogan chose to shield the two glass walls of the pavilion, which houses a gym, was the first one to

Protecting the glass walls of the house's rooftop gym are screens built from Erwin Hauer's first modules, named Design 1 when they were introduced in 1950.

walk through

firm: studio mk27
site: são paulo, brazil

MICHAEL OSTER
MAY 2012 INTERIORDESIGN.NET 55

“How would I model this?”

creo™ parametric



Creo

How

“How would I model this?”



Creo

How

“How would I model this?”



Creo

How

“How would I model this?”



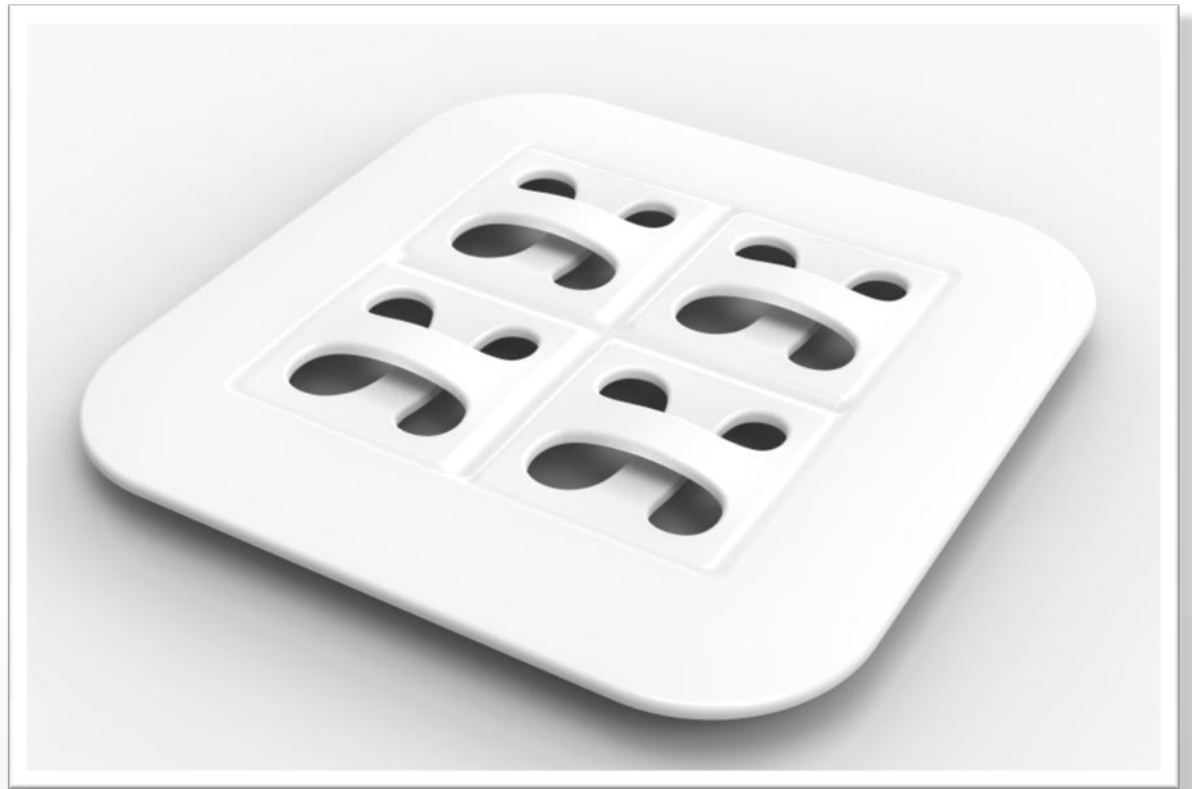


Creo

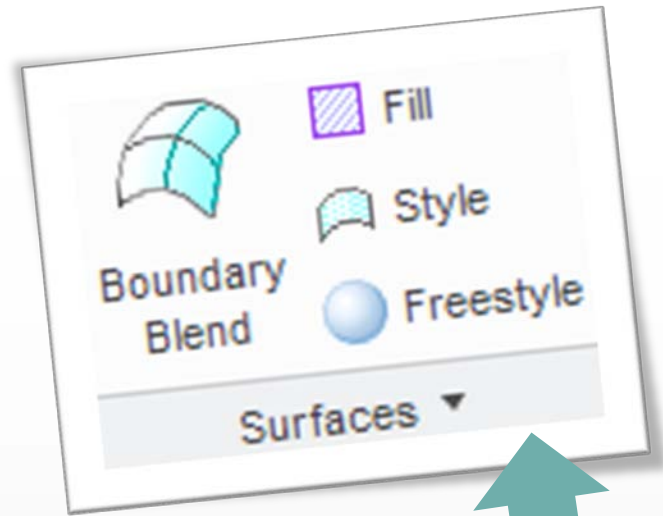
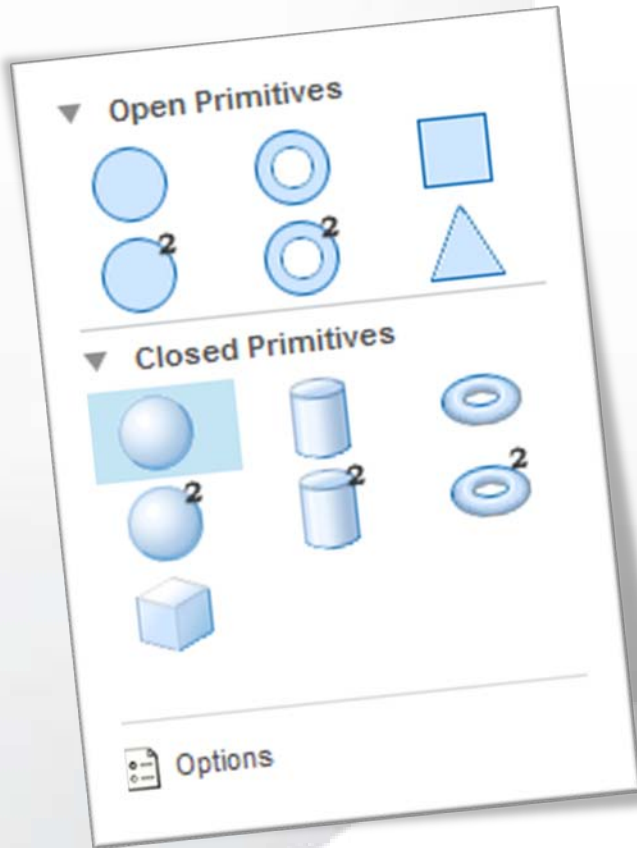
How

“How would I model this?”


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LIVE





Demonstration




Freestyle

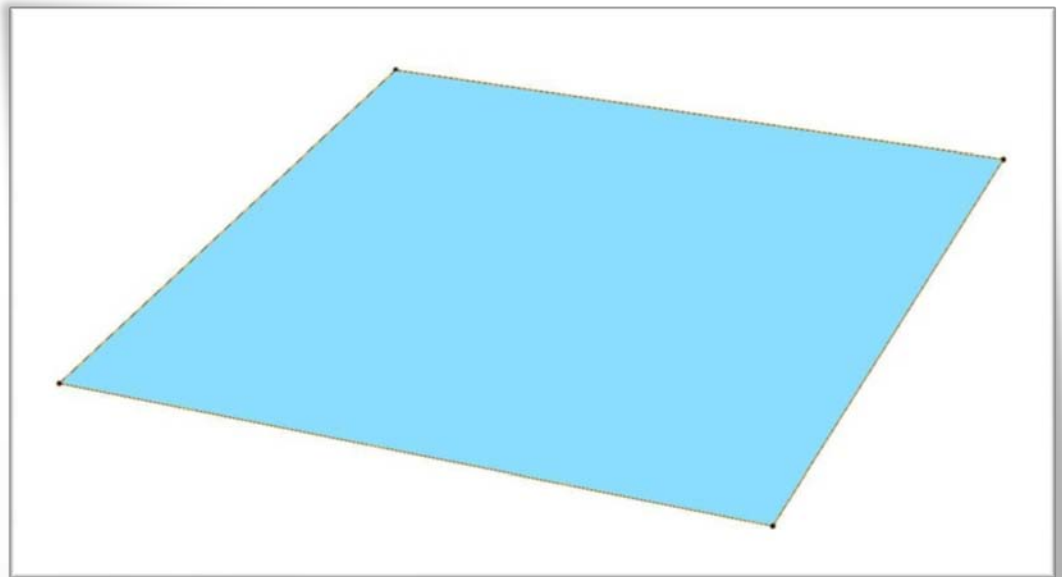
 **Extrude**


 **Connect**


 **Edge Split** ▼


 **Face Split** ▼


Create

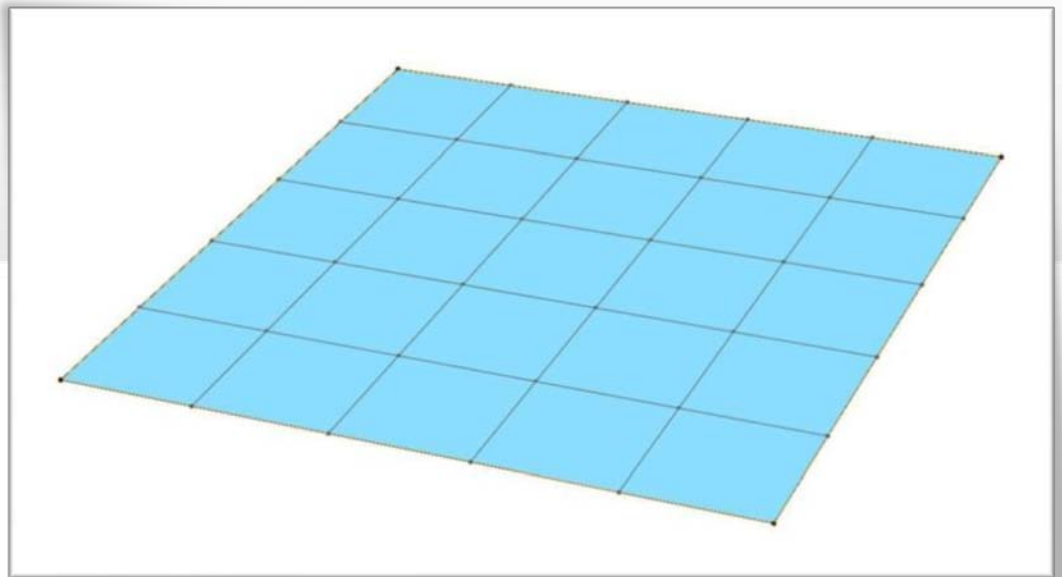


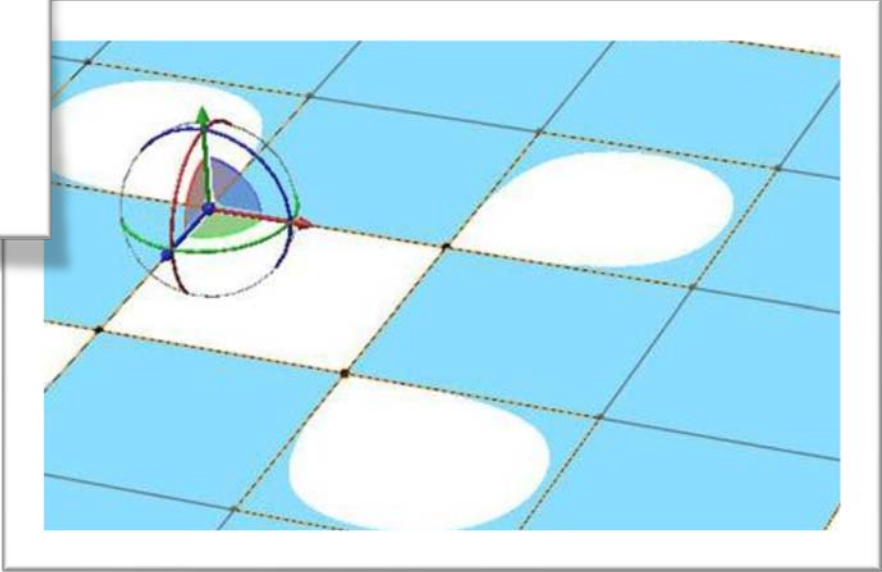
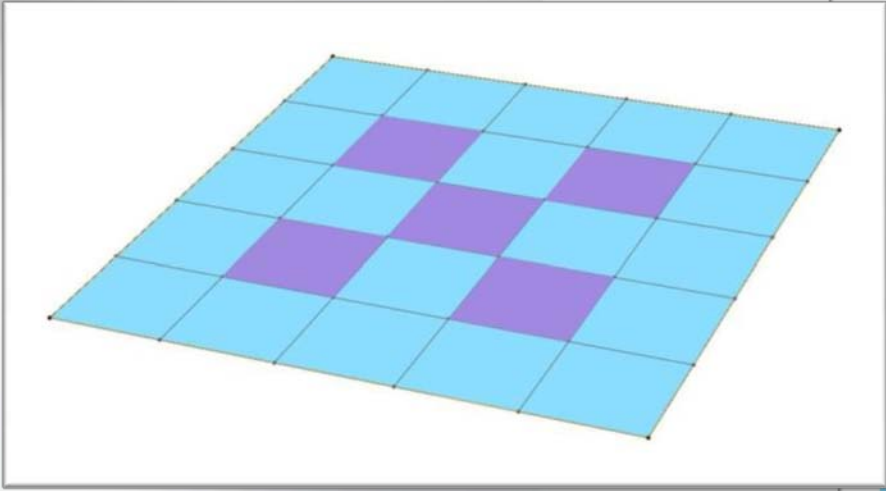
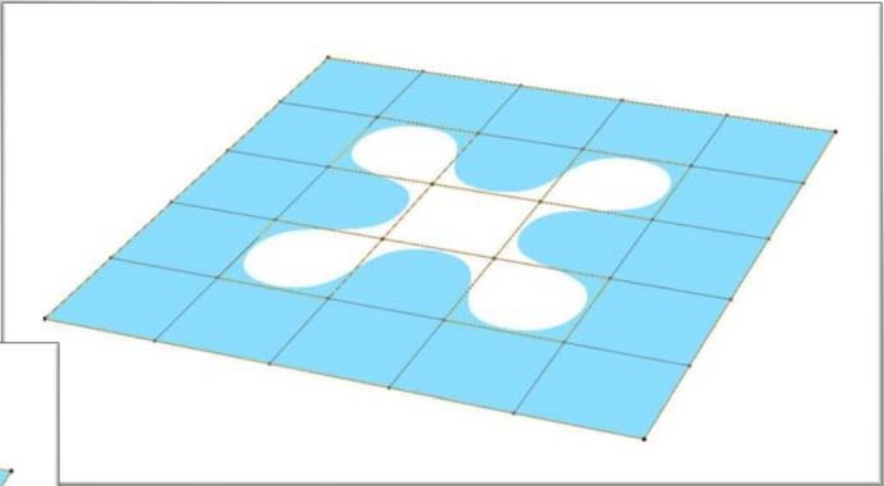
 **1 Split**

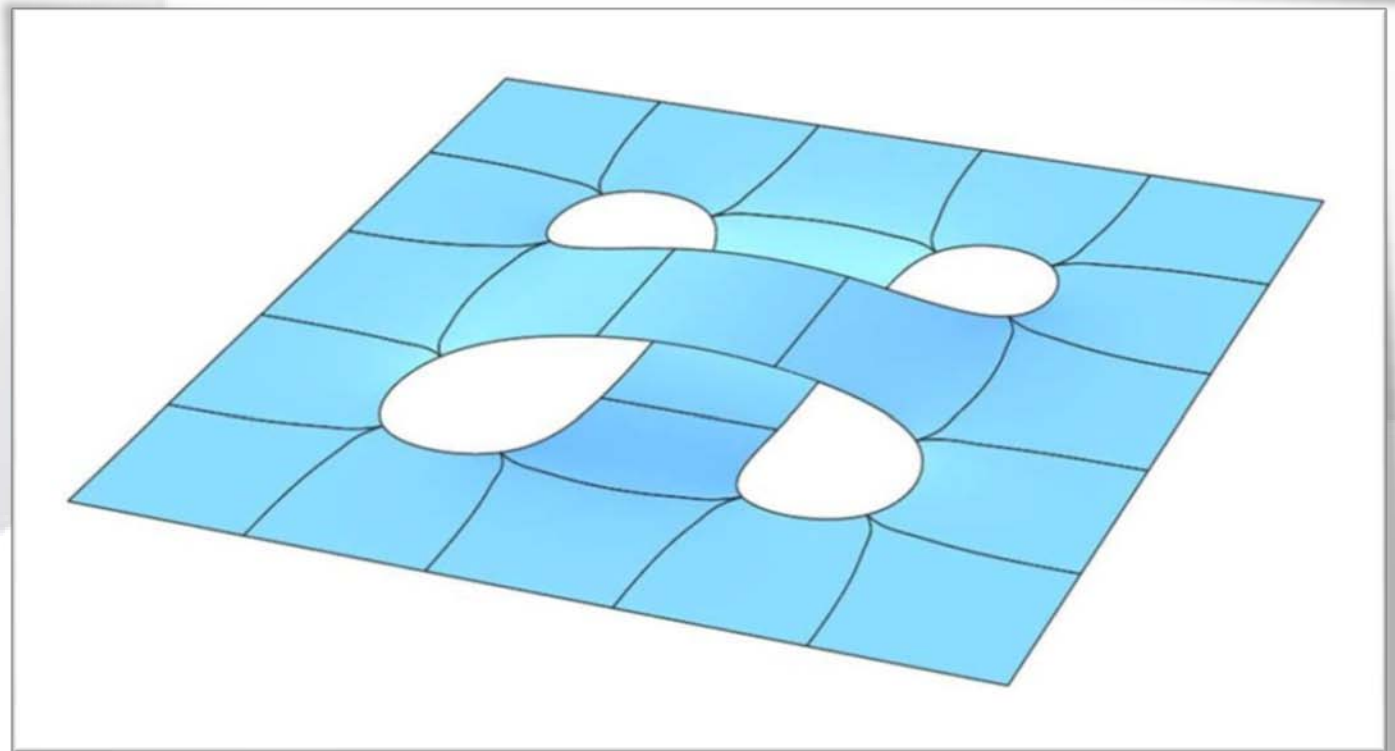
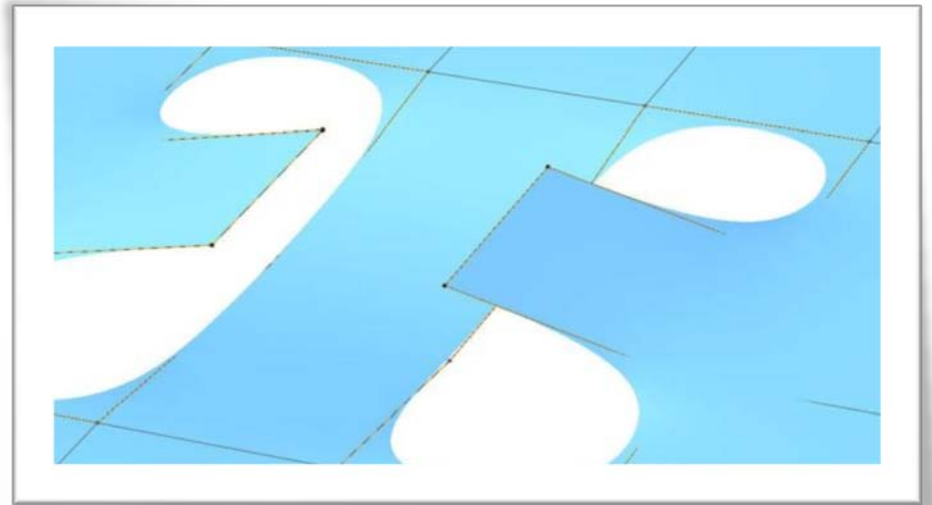
 **2 Splits**

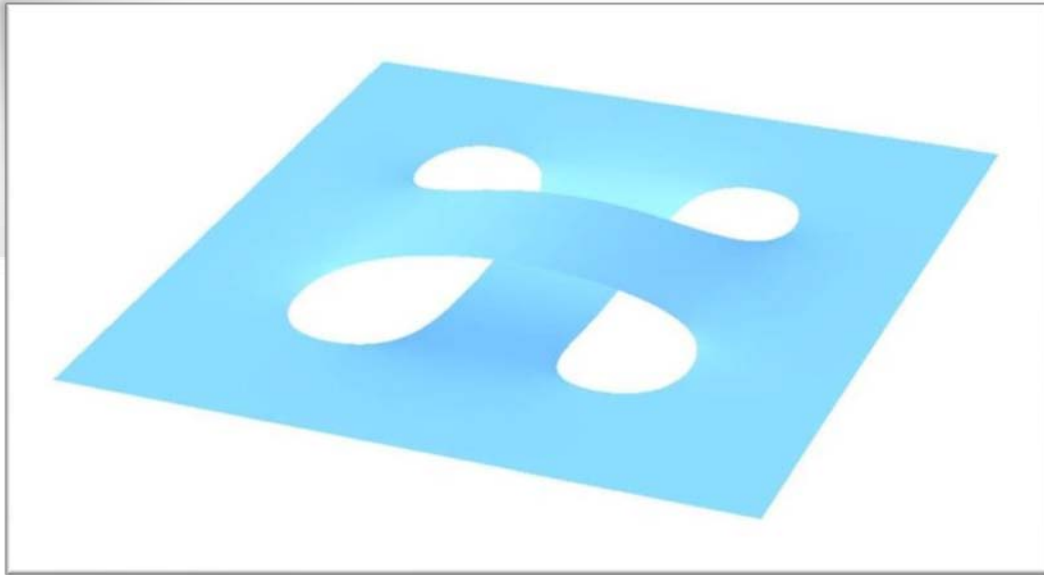
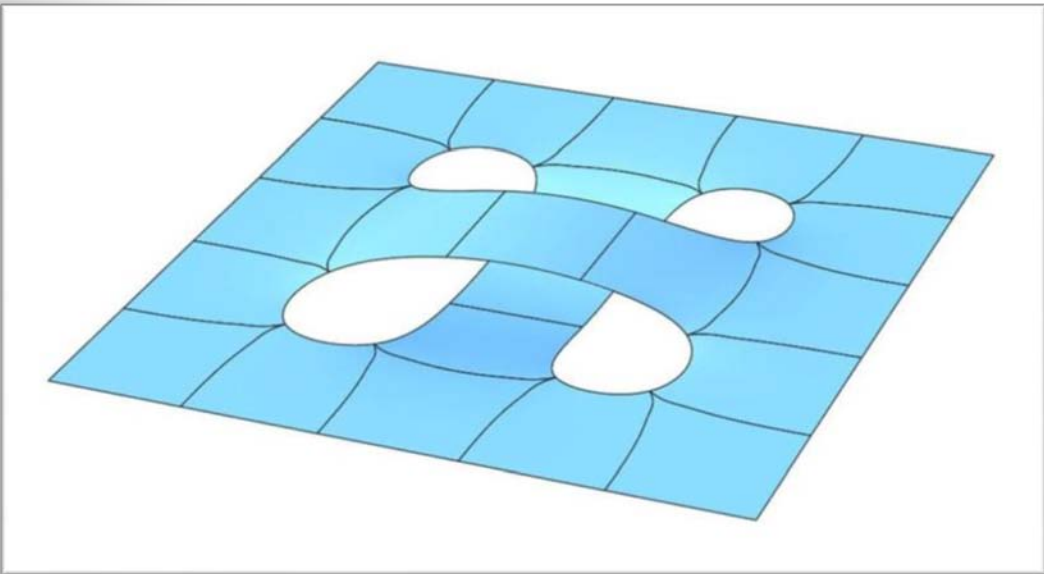
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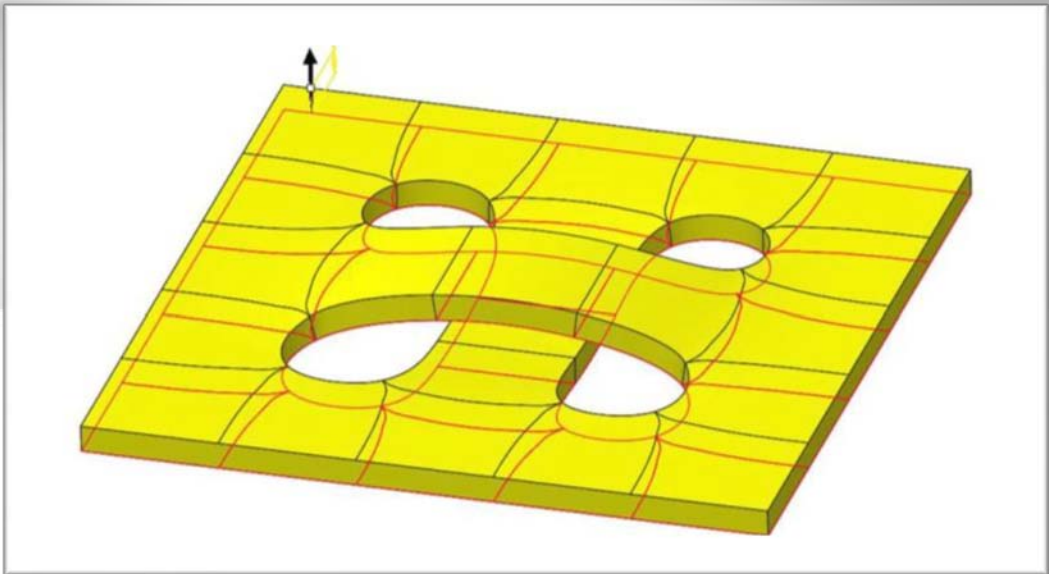
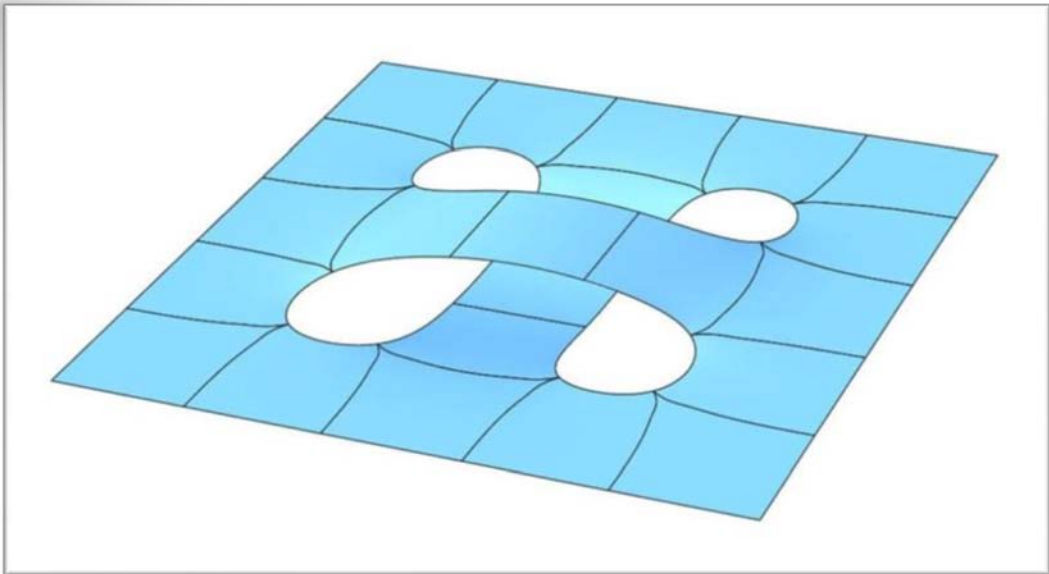
 **4 Splits**

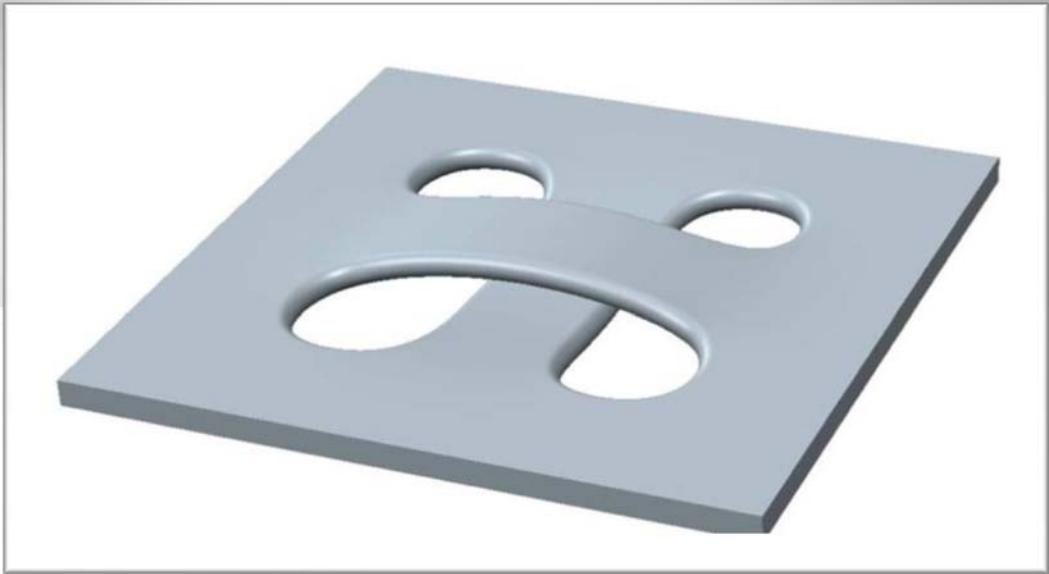
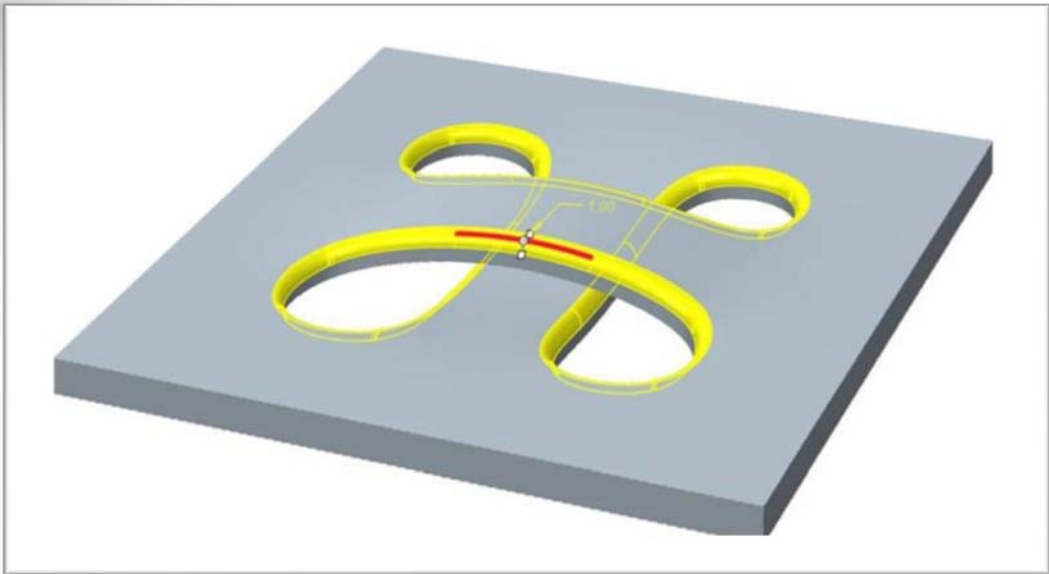














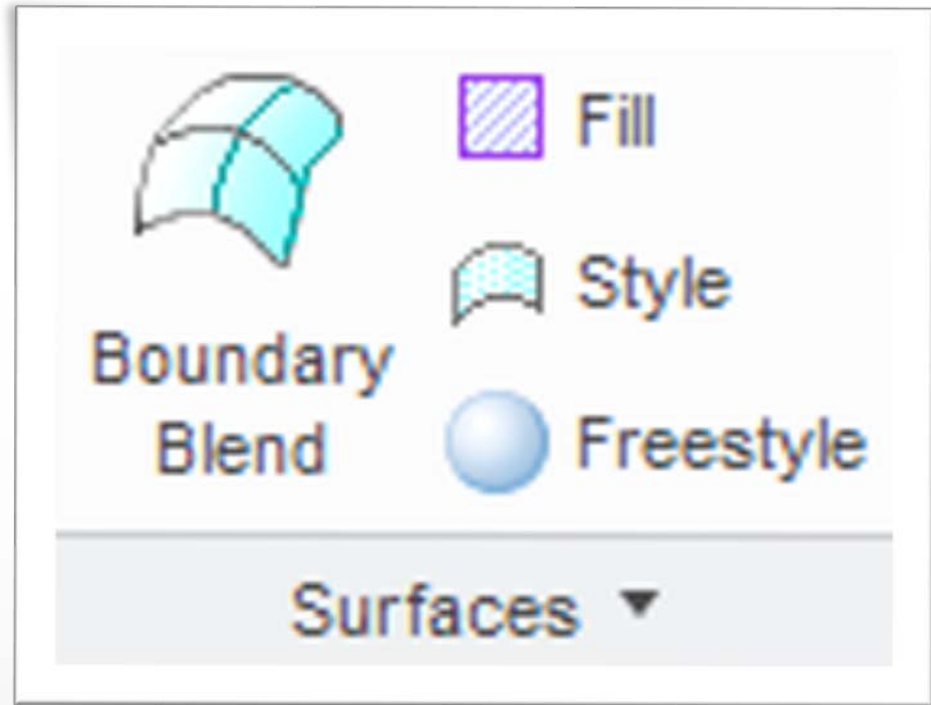
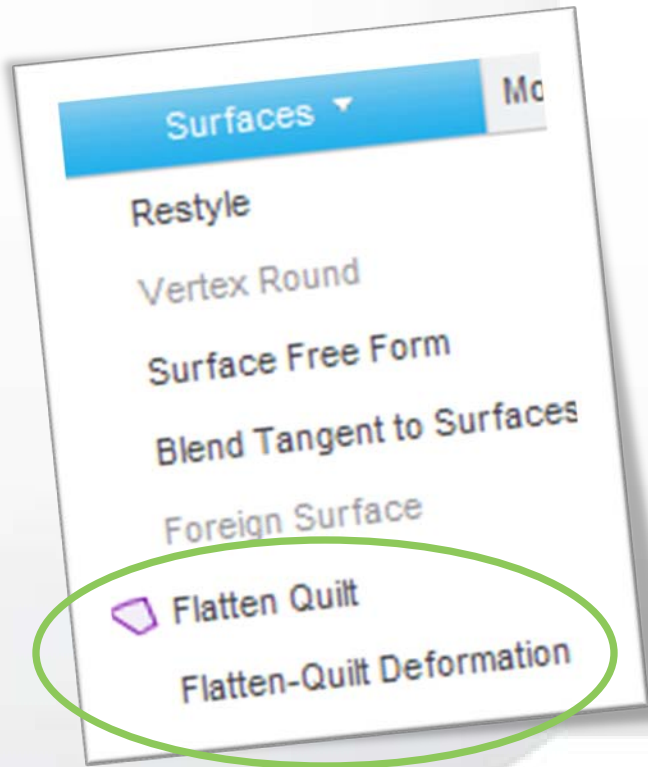


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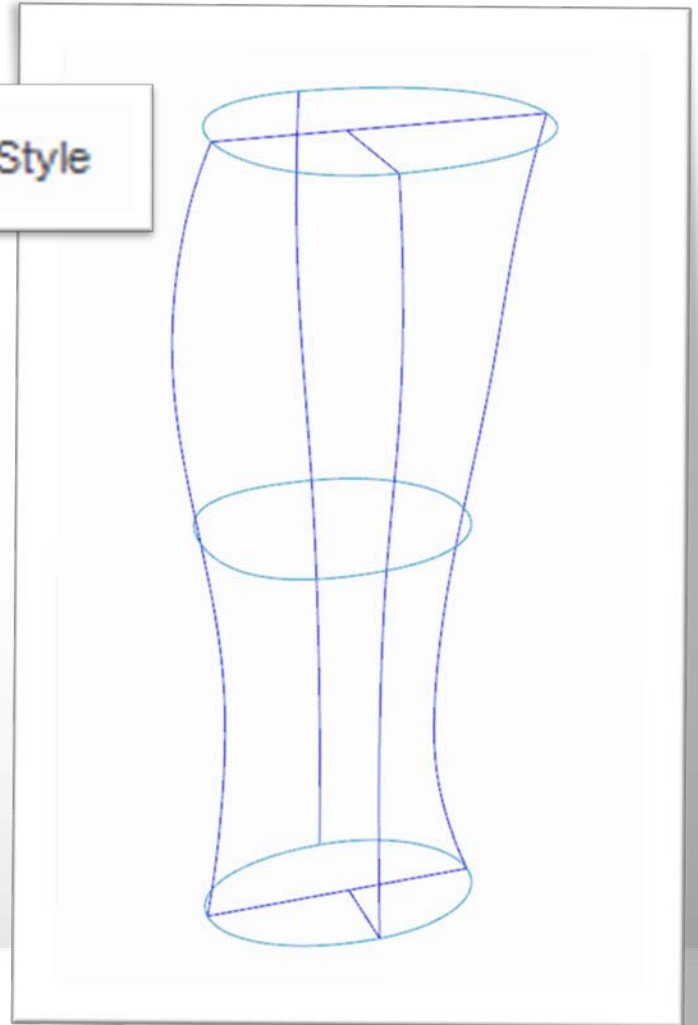
Demonstration







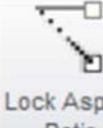


Tech. Surf / ISDX



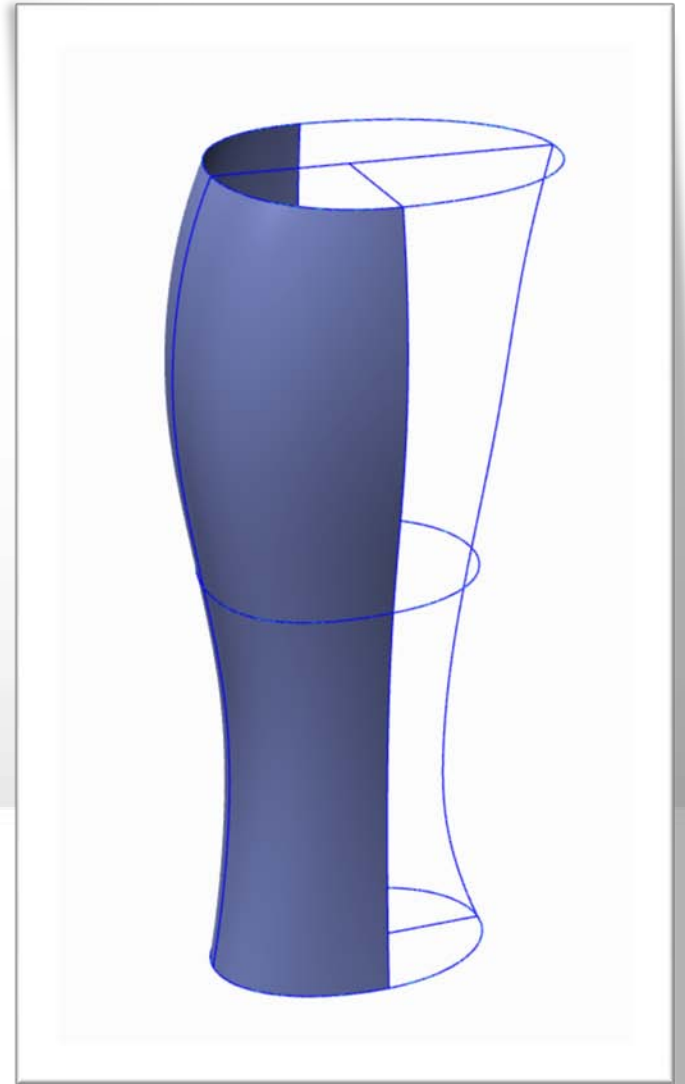
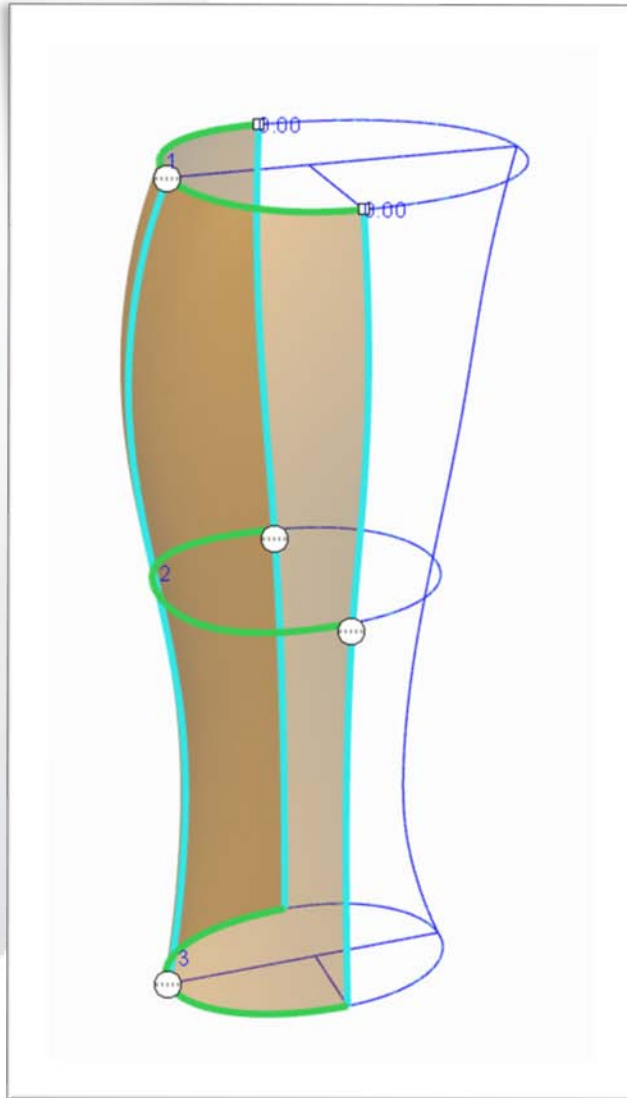
 Style



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Image			Fit		Scale



Boundary
Blend





Extend



Project



Offset



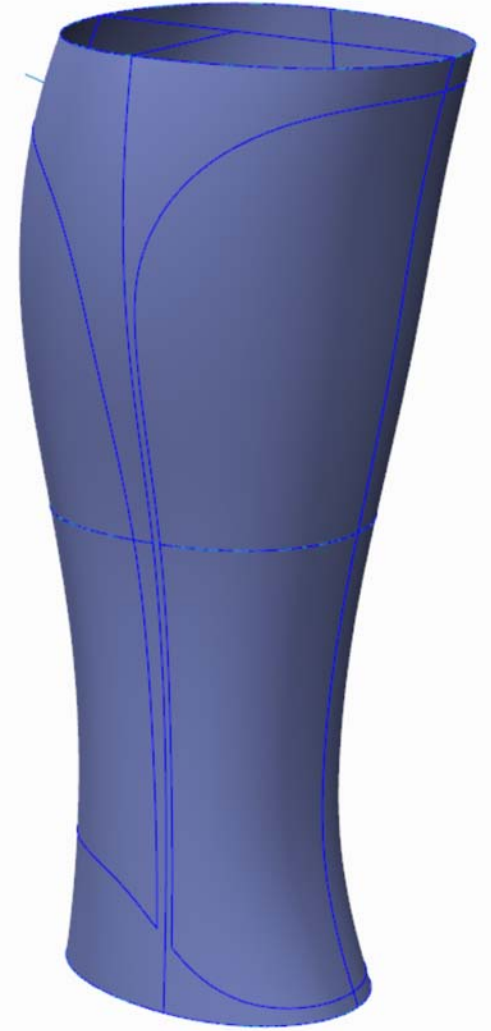
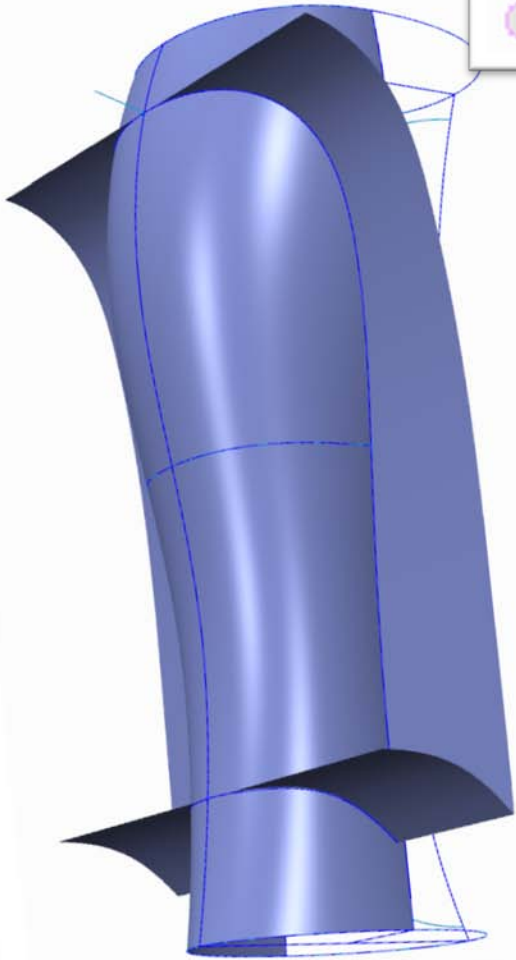
Thicken



Intersect

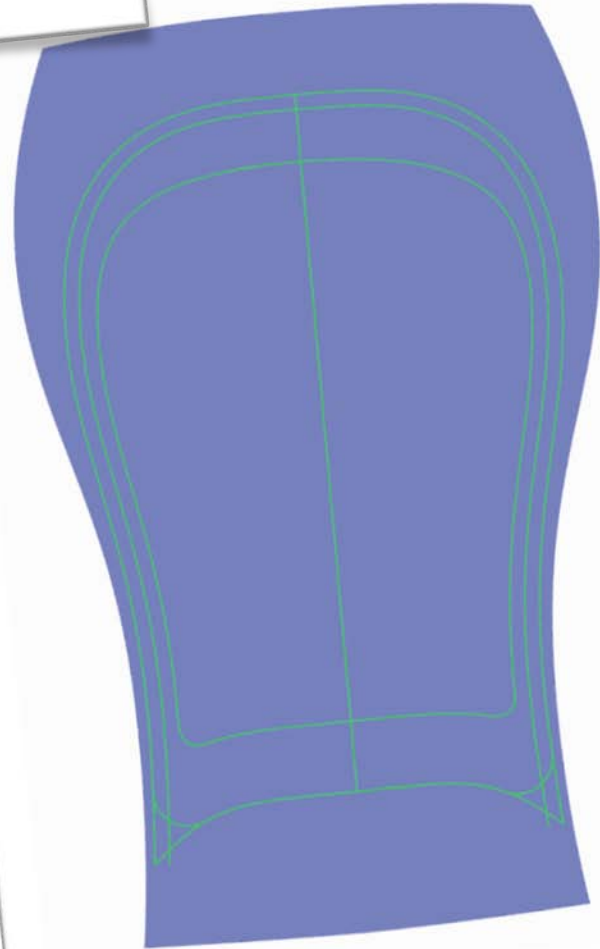
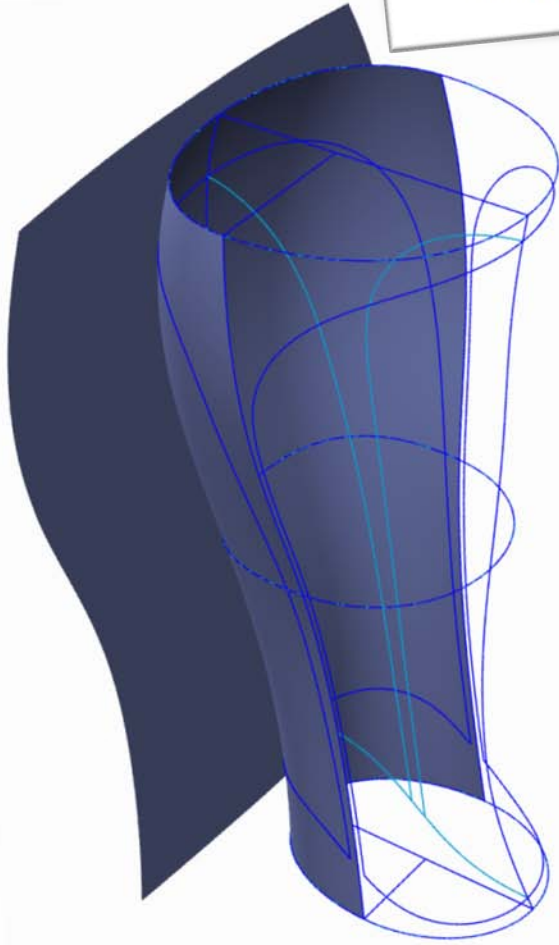


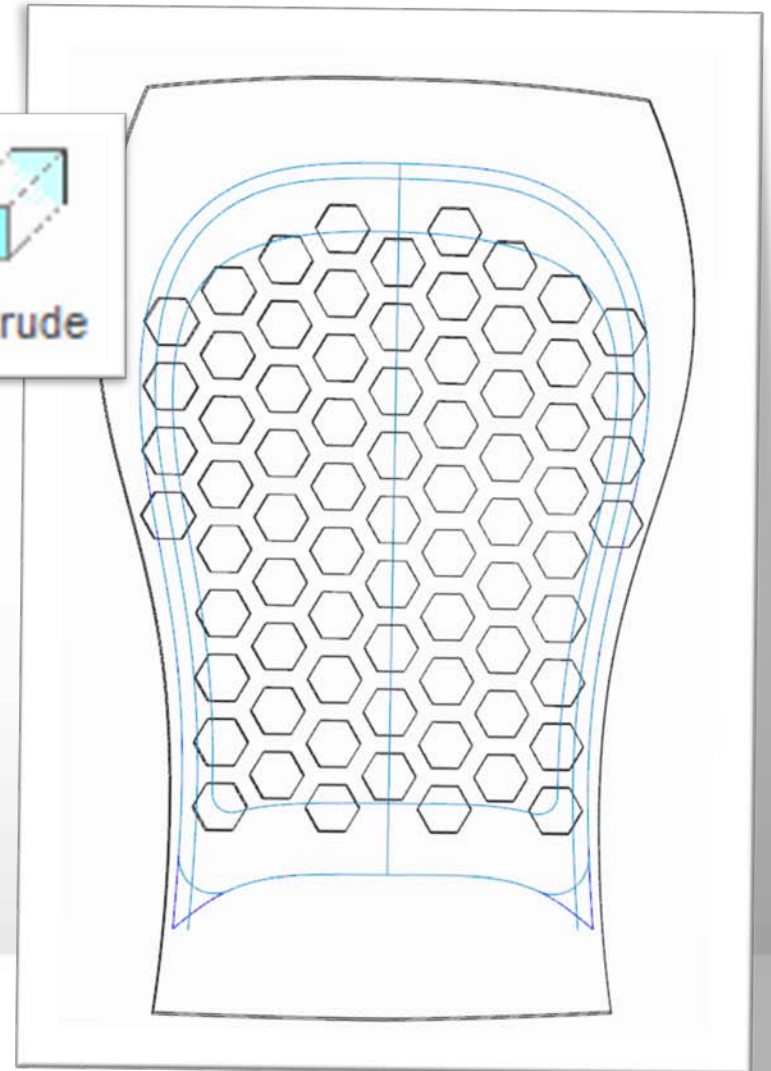
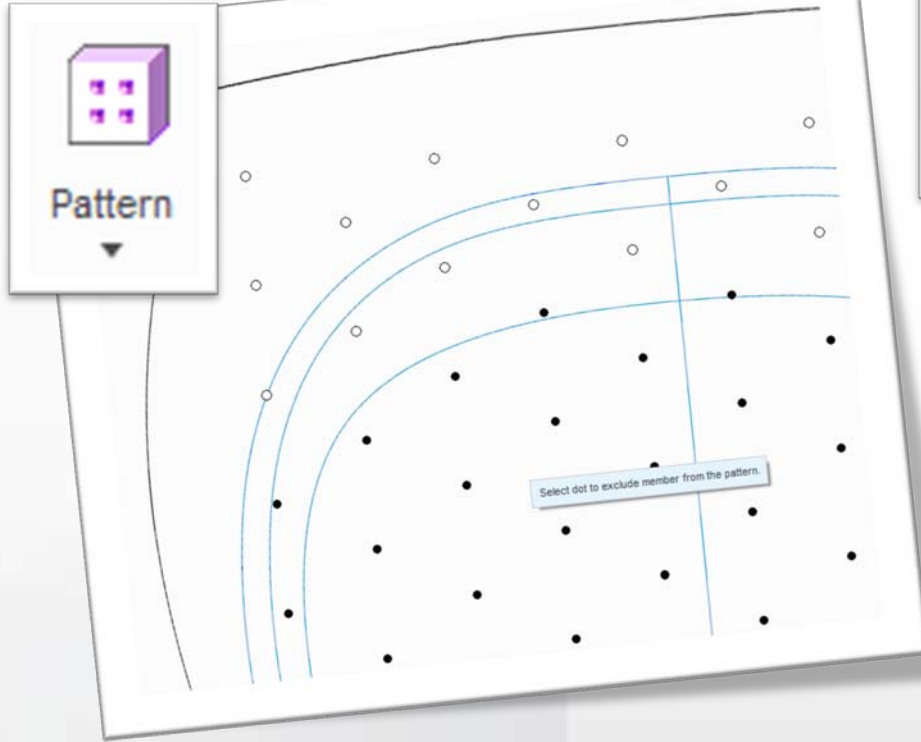
Solidify



Flatten Quilt

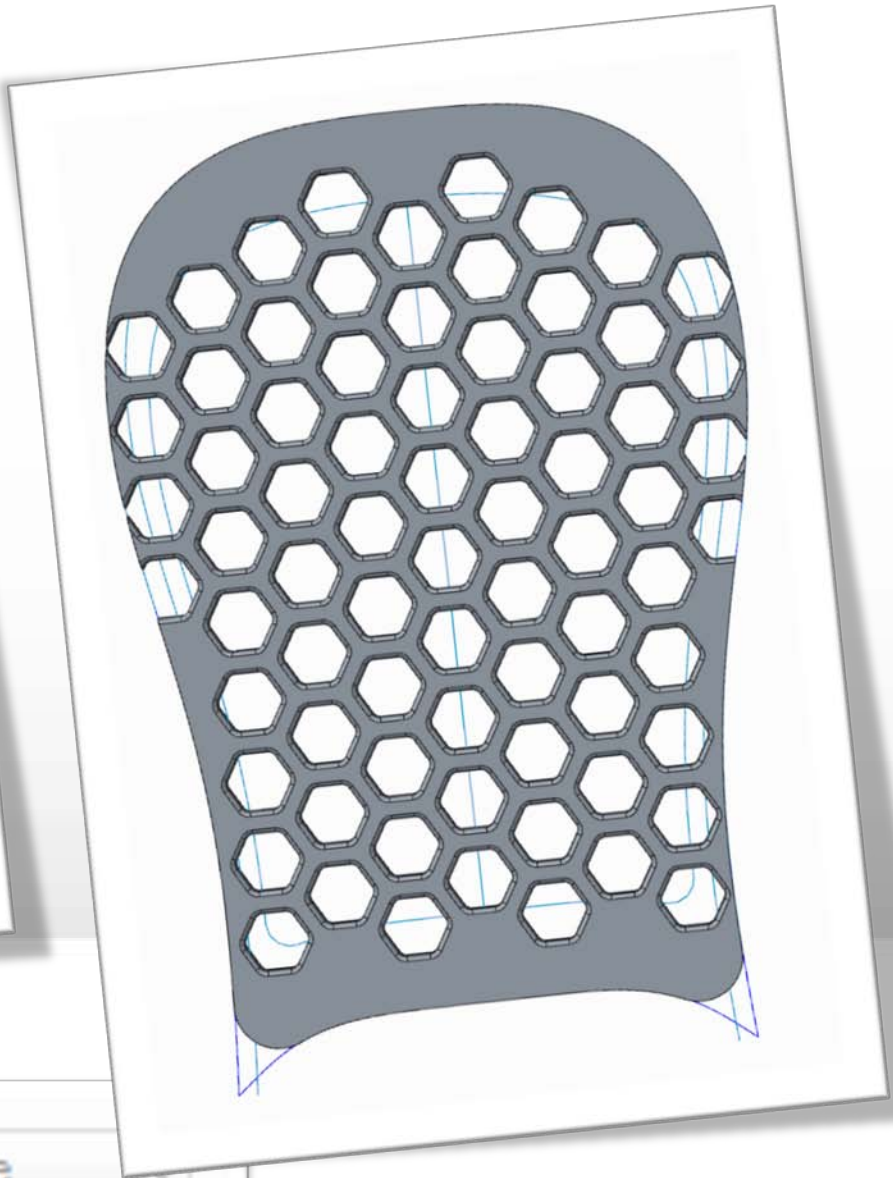
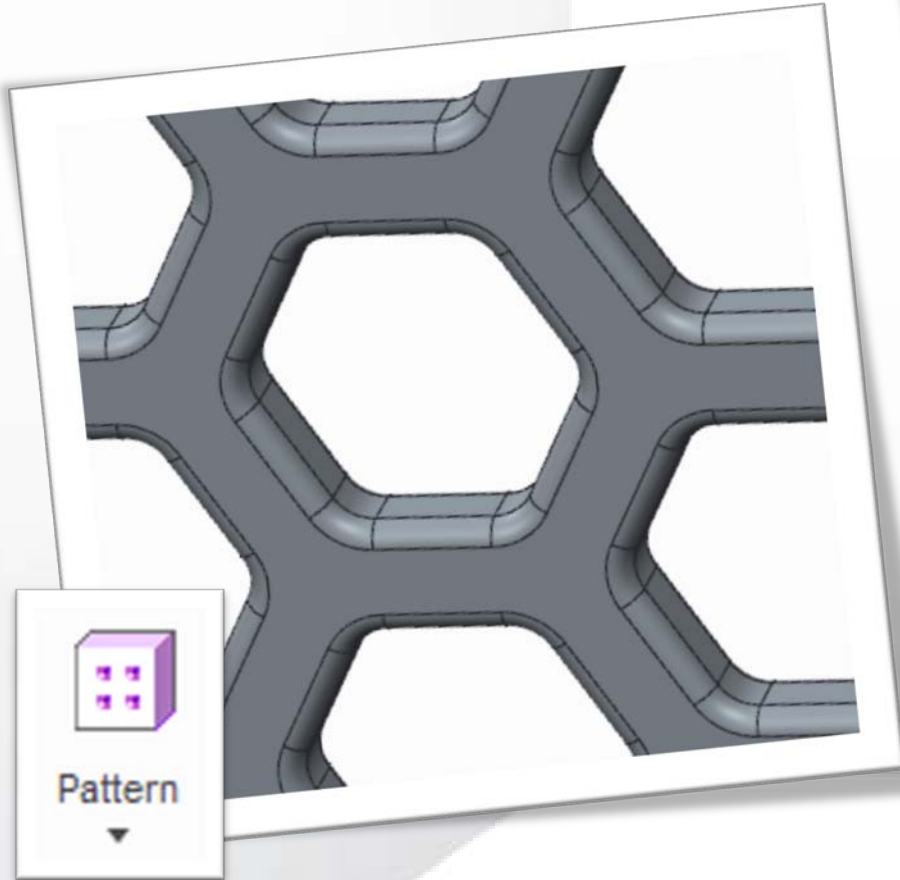
Flatten-Quilt Deformation





Select dot to exclude member from the pattern.





Pattern



Reference



Reference type

Feature



Extrude



Revolve

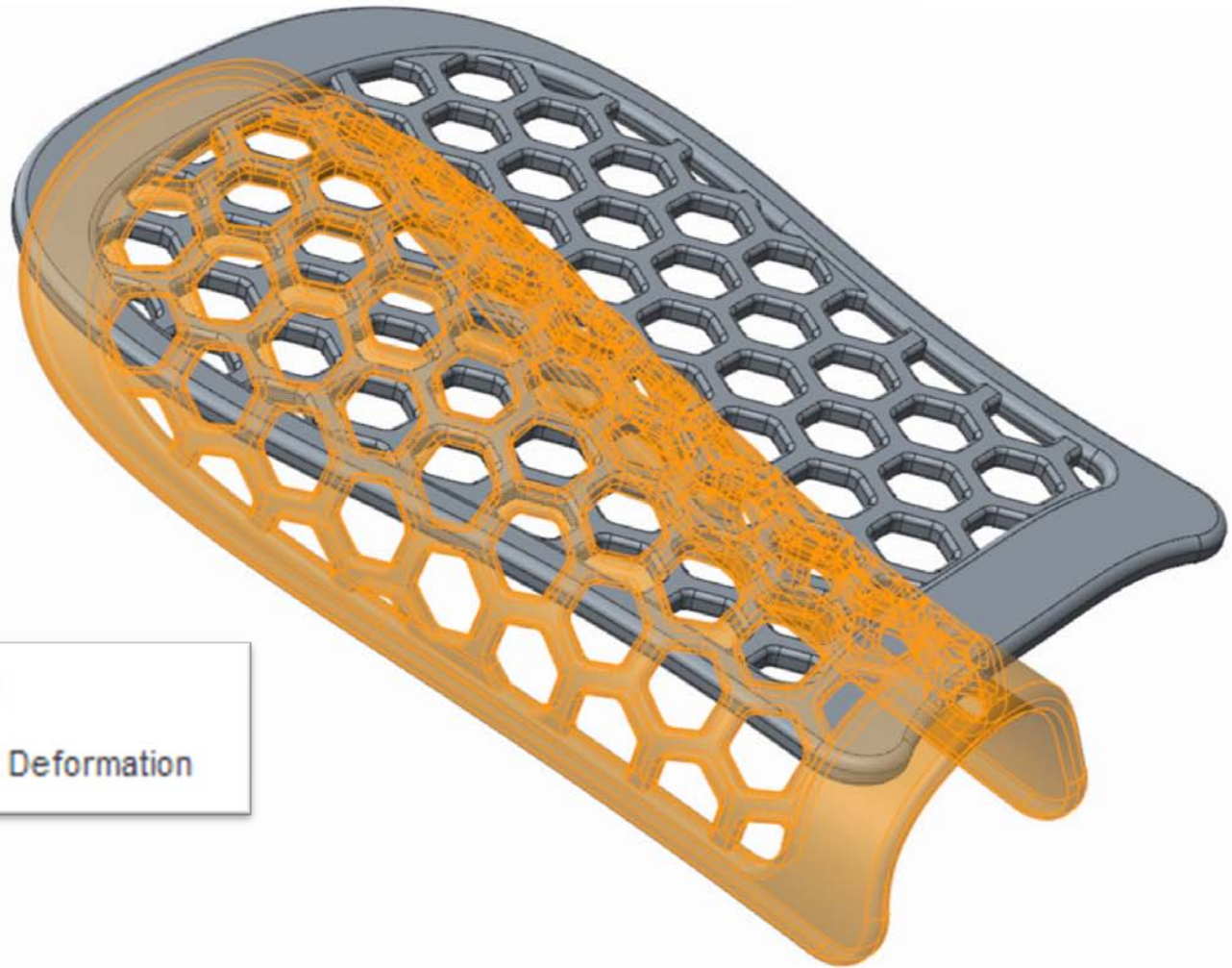


Sweep ▾



Swept Blend

Shapes ▾



Flatten Quit

Flatten-Quit Deformation



Flatten Quilt
Flatten-Quilt Deformation

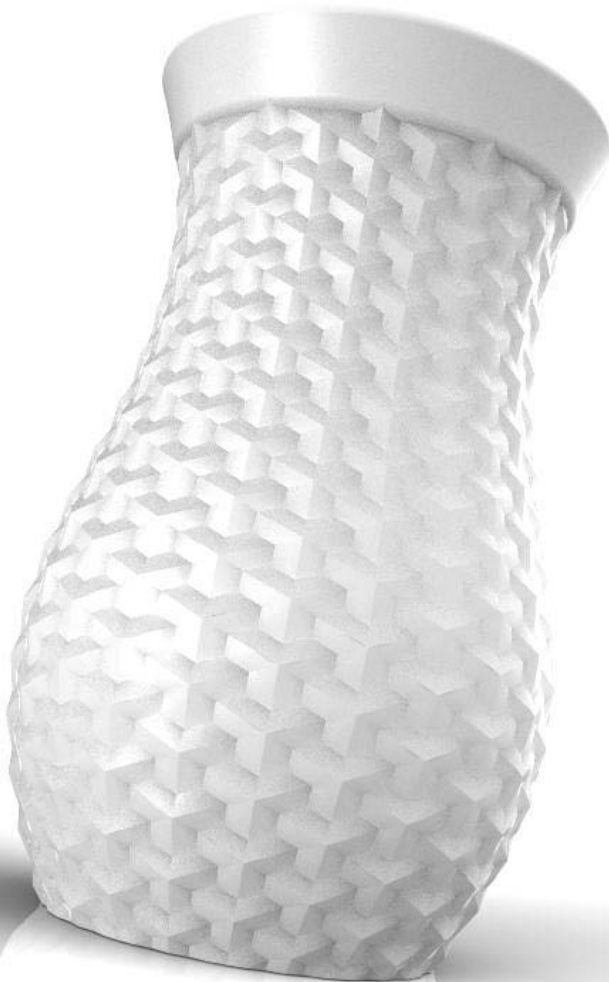
3D Manikins
allow for test fitting in the CAD
environment and a quick
visual feedback of the product
in context.





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Geometries that Delight



Creo Parametric offers a **full suite of tools** to develop most any geometry one can imagine.

It's up to you **to explore** and delve into the exciting world of **3D surface creation!**

Thank You!